SELECTIVELY AUDITING ACCESSES TO ROWS WITHIN A RELATIONAL DATABASE AT A DATABASE SERVER

ABSTRACT

One embodiment of the present invention provides a system that selectively audits accesses to a relational database system. This system starts by receiving a query from a client at a database server. The system processes this query at the database server to produce a query result. The system also creates an audit record for rows in relational tables that are accessed by the query, and that satisfy an auditing condition. Next, the system records the audit record in an audit record store and returns the query result to the client. Integrating the auditing facility into the relational database system in this manner ensures that auditing is performed in the same way regardless of which application generates the query. Furthermore, this auditing is transparent to applications and users. In one embodiment of the present invention, the system additionally modifies the query so that processing the query causes the audit record to be created and recorded for rows in relational tables that are accessed by the query and that satisfy the auditing condition. In a variation on this embodiment, the auditing condition is associated with a table in the relational database system.

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